

Status of the Claims

1. (Currently amended) A DNA construct, which comprises a the DNA molecule of SEQ ID NO:1 or a DNA molecule which is at least 90% homologous thereto, wherein said DNA molecule is under control of a heterologous neuro-specific promoter, and wherein said DNA molecule codes for a protein that has an activity of AD7c-NTP when over-expressed in neuronal cells.

2. (Original) The DNA construct of claim 1, which is contained within a vector.

3. (Previously amended) The DNA construct of claim 1, which is contained by a virion.

4. (Cancelled)

5. (Original) A host cell transformed with the DNA construct of claim 1.

6. (Previously amended) The host cell of claim 5, which is a neuronal cell.

7 - 9. (Cancelled)

10. (Currently Amended) An *in vitro* method for screening a candidate drug that is potentially useful for the treatment or prevention of Alzheimer's disease, neuroectodermal tumors, malignant astrocytomas, ~~and~~ or glioblastomas, said method comprising:

- f1
- (a) contacting a candidate drug with the host cell of claim 5, and
 - (b) detecting at least one of the following:
 - (i) the suppression or prevention of expression of the protein coded for by the DNA construct of said host cell;
 - (ii) the increased degradation of the protein coded for by the DNA construct of said host cell; or
 - (iii) the reduction of frequency of at least one of neuritic sprouting, nerve cell death, degenerating neurons, neurofibrillary tangles, or irregular swollen neurites and axons in said host cell, wherein said host cell is a neuronal cell;

due to the drug candidate compared to a control cell line which has not contacted the candidate drug.

11. (Previously amended) The method of claim 10, wherein said protein has SEQ ID NO:2.

12. (Original) The method of claim 10, wherein said protein is over-expressed by said host cell.

13. (Original) The method of claim 10, wherein said cell is a neuronal cell.

14 - 34. (Cancelled)

35. (Previously added) The DNA construct of claim 1, wherein said activity of AD7c-NTP is selected from the group consisting of neuritic sprouting, nerve cell death, nerve cell degeneration, neurofibrillary tangles, and irregular swollen neurites.

36. (Previously amended) The DNA construct of claim 1, wherein said DNA molecule codes for a protein having the amino acid sequence of SEQ ID NO:2.

37. (Previously amended) The DNA construct of claim 1, wherein said DNA molecule consists of the DNA molecule of SEQ ID NO:1.

38. (Cancelled)

39. (Currently amended) A DNA construct, which comprises a DNA molecule ~~of SEQ ID NO:1~~ that encodes the amino acid sequence set forth in SEQ ID NO:2, wherein said DNA molecule is under control of a heterologous neuro-specific promoter, and wherein said DNA molecule codes for a protein that has an activity of AD7c-NTP when expressed in neuronal cells.

40. (Previously added) The DNA construct of claim 39, which is contained within a vector.

41. (Previously added) The DNA construct of claim 39, which is contained within a virion.

42. (Previously added) A host cell transformed with the DNA construct of claim 39.

43. (Previously added) The host cell of claim 42, which is a neuronal cell.

44. (Currently amended) An *in vitro* method for screening a candidate drug that is potentially useful for the treatment or prevention of Alzheimer's disease, neuroectodermal tumors, malignant astrocytomas, ~~and~~ or glioblastomas, said method comprising:

- (a) contacting a candidate drug with the host cell of claim 42, and
- (b) detecting at least one of the following:
 - (i) the suppression or prevention of expression of the protein coded for by the DNA construct of said host cell;
 - (ii) the increased degradation of the protein coded for by the DNA construct of said host cell; or
 - (iii) the reduction of frequency of at least one of neuritic sprouting, nerve cell death, degenerating neurons, neurofibrillary tangles, or irregular swollen neurites and axons in said host cell, wherein said host cell is a neuronal cell;

due to the drug candidate compared to a control cell line which has not contacted the candidate drug.

45. (Currently amended) The method of claim 44, wherein said ~~protein has SEQ~~
~~ID NO:2~~ DNA molecule comprises a DNA sequence having the nucleotide sequence set forth
in SEQ ID NO:1.

46. (Previously added) The method of claim 44, wherein said protein is over-
expressed by said host cell.

47. (Previously added) The method of claim 44, wherein said cell is a neuronal
cell.

48. (Cancelled)

49. (Currently amended) The DNA construct of claim 39, wherein said DNA
molecule ~~codes for a protein having the amino acid sequence of SEQ ID NO:2~~ comprises a
DNA sequence having the nucleotide sequence set forth in SEQ ID NO:1.
